

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference Cal 84635	FOR FURTHER ACTION		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)
International application No. PCT/EP 02/03687	International filing date (<i>day/month/year</i>) 27.03.2002	Priority date (<i>day/month/year</i>) 27.03.2002	
International Patent Classification (IPC) or both national classification and IPC B41M5/035			
Applicant PICONI, Corrado ET AL.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

I ☒ Basis of the opinion

II ☐ Priority

III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability


IV ☐ Lack of unity of invention

V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

VI ☐ Certain documents cited

VII ☐ Certain defects in the international application

VIII ☐ Certain observations on the international application

Date of submission of the demand 06.10.2003	Date of completion of this report 29.04.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Martins Lopes, L Telephone No. +31 70 340-2889



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 02/03687

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-7 as originally filed

Claims, Numbers

7 (part), 8-19 as originally filed

1-6, 7 (part) received on 13.04.2004 with letter of 07.04.2004

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY
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International application No. **PCT/EP 02/03687**

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-19
	No: Claims	
Inventive step (IS)	Yes: Claims	1-19
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations

see separate sheet

Section V

The application relates to a process comprising the application of a polymeric carrier consisting of at least one thermoplastic polymer based on polyester or copolyester to a sublimatic transfer printed paper. The aim is to obtain a sublimatic transfer paper with good transfer properties to vegetable fibres.

The closest prior art (D1 : US4576610) discloses a process comprising the application of a composition comprising a polyester resin, a hardener, and a dye binder (among other components - see e.g. example 1) to a release paper having a layer of sublimable dye. The aim is to obtain a sublimatic transfer paper with good transfer properties to vegetable fibres.

Claim 1 differs from D1 in that the applied polymeric carrier consists solely of polyester- or copolyester-based thermoplastic polymer, i.e. any other components are excluded. Claim 1 as well as independent claims 14, 15, 17 and 19 are thus **novel** in the sense of article 33(2) PCT.

In view of the above, the objective problem to be solved is to provide an alternative method for obtaining sublimatic transfer papers with good transfer properties to vegetable fibres. There is no disclosure or suggestion in the prior art that by using a polyester- or copolyester-based thermoplastic polymer alone would provide viable sublimatic transfer papers for vegetable fibres. D1 teaches namely the addition of a hardener and a dye binder, which are deemed necessary for a better transfer and dye and polyester uptake; there is no teaching or any indication that would lead the skilled man to suppress those components. For the above reasons, claims 1 as well as independent claims 14, 15, 17 and 19 involve an **inventive step** in the sense of article 33(3) PCT.

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CLAIMS

1. ~~At application~~ process^{comprising the application} of a polymeric carrier consisting of at least one thermoplastic polymer based on
5 polyester or copolyester to sublimatic transfer printed paper.
2. The process according to claim 1, characterized in that the application of the polymeric carrier to the transfer printed paper is effected by means of melting,
10 coupling, coating or sintering.
3. The process according to claim 2, characterized in that the application by melting is effected by means of bubble extrusion plants, in a flat head or in a calender.
4. The process according to claim 2, characterized in
15 that the application by coupling is effected by the coupling of a previously formed polymeric film.
5. The process according to claim 2, characterized in that the application by coating is effected by means of a rotogravure, roll revers, etc. of solutions of the poly-
20 meric carrier.
6. The process according to claim 2, characterized in that the application by sintering is effected by the sintering of powders.
7. The process according to any of the previous claims,
25 characterized in that the polymeric carrier consists of